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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,350	04/17/2006	Patrick Joseph Silcock	AJPARK29.001APC	9105
20995 7590 01/17/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER BRUNSMAN, DAVID M	
			ART UNIT	PAPER NUMBER
			1755	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		01/17/2007	ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 01/17/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

10/531,350

Applicant(s)

SILCOCK ET AL.

Examiner

David M. Brunman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12, 17, 21-28 and 31-33 is/are rejected.
- 7) ☒ Claim(s) 10, 13-16, 18-20 and 29 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

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The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites that the film is "substantially soluble" but, fails to set forth the conditions, including solvent, in which it is soluble.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-9, 11, 12, 21, 22, 25-28 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5543164.

The reference teaches a method of forming a film containing milk casein (see, column 5, line 22; milk derived casein naturally containing Ca ion in the hydroxyapatite form) wherein an aqueous solution of the casein is denatured (hydrolyzed) and crosslinked cast on a surface and dried to form an edible film, as well as food products coated therewith. Column 6, lines 22-31 teach the addition of a plasticizer such as glycerol to the film forming material. While the examples of the reference do not specifically disclose the combination of casein and glycerol in particular, it would have been obvious to one of ordinary skill in the art to select casein and glycerol from amongst the preferred choice of

protein and polyhydric plasticizer disclosed by the patent. The addition of an emulsifier to an aqueous dispersion would have been obvious to one of ordinary skill in the art because the term "emulsifier" is an art-recognized term designating an ingredient useful to enable formation of an emulsion. The emulsifier of claim 22 is noted as a popular food-grade emulsifier and its use would have been obvious to one of ordinary skill in the art because of its reputation thereas.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5543164 as applied to claim 1 above, and further in view of O'Sullivan et al.

The difference between claim 17 and the primary reference is the manner by which the casein is crosslinked. O'Sullivan et al teach milk casein may be crosslinked using transglutaminase. It would have been obvious to one of ordinary skill in the art to employ transglutaminase for that reason.

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5543164 as applied to claim 1 above, and further in view of PCT/FR00/008703, filed March 2000 and published September 2001, in the form of its English Equivalent US 2006/0073188 A1.

The difference between claims 23-24 and the instant claims is additional ingredients of the film. The '188 publication teaches addition materials including colorants and oral care agents to casein films in order to deliver agents to the buccal cavity. It would have been obvious to one of ordinary skill in the art to add a colorant or oral care agent to the film composition of the primary reference for that reason.

Claims 10, 13-16, 18-20 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to teach or suggest adding calcium in the amounts recited in claim 10 as those amounts far exceed those naturally occurring. It fails to teach or suggest the particular advantages to the range of degree of hydrolysis or of crosslinking recited in claims 13, 14 and 18-20. There is no teaching in the prior art to motivate one of ordinary skill in the art to employ an enzyme such as trypsin to hydrolyze the casein. And, the prior art fails to teach or suggest that the casein film forming compositions of the instant invention might have the properties necessary to form films by extrusion.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Brunsman whose telephone number is 571-272-1365. The examiner can normally be reached on M, Th, F, Sa; 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David M Brunsman  
Primary Examiner  
Art Unit 1755

DMB

